10

15

5

WHAT IS CLAIMED IS:

- 1. A method of enhancing modulation transfer function performance, applicable to a method of scanning an object using a scanner with a linear sensor, the method comprising:
- obtaining smooth image digital data;

scanning the object in a forwarding direction and a direction perpendicular to the forwarding direction; and

processing digital data of a calculation pixel obtained by scanning the object according to the smooth image digital data.

- 2. The method according to claim 1, wherein the smooth image digital data is obtained prior to scanning the object.
- 3. The method according to claim 1, wherein the smooth image digital data is obtained from a smooth image region with a uniform scan brightness.
- 4. The method according to claim 1, wherein processing the digital data of the calculation pixel obtained by scanning the object further comprises:

when
$$X>(N-1)$$
,

20
$$A(X)=F(X)*N-A(X-1)-A(X-2)-...-A(X-N+1)$$
; and

when $X \le N$,

$$A(X)=F(X)*N-A(X-1)-A(X-2)-...-A(0)*(N-X)$$
:

wherein X-1 is a number of pixels of digital data obtained before obtaining the calculation pixel excluding the pixel contained in the smooth image digital data, N is a

number of calculation pixel included in one sensor cell, A(X) is digital data of the Xth calculation pixel, A(0) is digital data of the smooth image pixel, and F(X) is digital data obtained by scanning of the sensor cell including the obtained calculation pixel.